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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/647,155	03/01/2001	Peter Hedenberg	111848	5276

466 7590 04/15/2002

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EXAMINER	
COLE, ELIZABETH M	
ART UNIT	PAPER NUMBER
1771	8

DATE MAILED: 04/15/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

A 5-D

Office Action Summary	Application No.	Applicant(s)	
	09/647,155	HEDENBERG ET AL.	
	Examiner	Art Unit	
	Elizabeth M Cole	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *6* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

1. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 13 recites " a liquid-permeable outer layer enclosed between the two outer layers" . Th structure being claimed is not clear. How can an outer layer be enclosed between two outer layers? It seems that this should read an inner layer enclosed between two outer layers. Also, claim 13 recites "a liquid-permeable liquid-transferring layer arranged between the liquid-permeable outer layer and the absorptive body". Again, the structure is not clear. Is the liquid-permeable liquid-transferring layer also between the two outer layers? Also, there is no antecedent basis for "absorptive body". Also, the limitation that the liquid-permeable liquid-transferring layer are present in the form of a material laminate in accordance with claim 1 renders the claim indefinite because it is not clear what is meant by "in the form of" and it is not clear which layers in claim 13 correspond to layers 1 and 2 in claim 1.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2, 4-8, 10-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Buerger et al, U.S. Patent No. 5,652,041.

Buerger et al discloses a two layered material comprising a first nonwoven fabric and a second nonwoven layer formed from carded fibers. See col. 6, lines 6-8. The two layers are

thermally bonded together by means of a series of point bonds. The bonds may be circular or square in shape. See col. 6, lines 49-51. The bonds may be formed in groups wherein the point bonds in a group are closer to each other than they are to the bonds in another group. See fig. 6. Since the first layer generally has a thickness of about 0.01 to 1 mm and the depth of bonding is generally 0.015 to 0.070 inch, the bonded areas extend through the thickness of the first layer, (see col. 5, lines 54-56 and col. 6, lines 57-58). Since the material in the bonded areas is compressed, the bonded areas would necessarily and inherently have a higher density than the unbonded areas. The shortest relative distance *x* between two groups of bonding sites, which two groups are situated adjacent to each other, is at least twice as great as the greatest relative distance *y* between two bonding sites which are arranged adjacent to each other within the groups, as shown in figure 6.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-2, 4-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buerger et al, U.S. Patent NO. 5,652,041. Buerger et al discloses a fabric laminate as set forth above. Buerger et al differs from the claimed invention because Buerger et al does not disclose the thickness of the second layer and does not disclose that the distance *x* is 2-6 mm and *y* is 0.5-1 mm, (wherein x and y are defined in claim 10). With regard to the thickness of the second layer,

Buerger teaches that the staple layer provides softness, absorbency, and drapability and should have a weight of 10-80 gm/m^2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected the second layer so that it had a suitable thickness within the guidelines set forth by Buerger to provide the desired softness, absorbency, drapability and had a weight within the range set forth in Buerger. With regard to the distance x and y, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have optimized the distance x and y in view of figure 6, and also taking into account the dimensions of the laminate in order to arrive at a laminate which had sufficient integrity and which also remained soft, absorbent and drapability. Buerger et al teaches that the amount and pattern of bonding directly affects the strength of the individual layers and of the laminate. Therefore, the amount and pattern of bonding is a result effective variable and it would have been obvious to have optimized the bonding pattern and amount. One of ordinary skill in the art would have been motivated to optimize the bonding pattern and amount by the expectation that the optimum pattern and amount of bonding would result in a strong laminate which was also strong, absorbent and drapable.

6. Claims 3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buerger et al as applied to claims 1-2, 4-12 above, and further in view of WO 97/02133 to Zelazoski et al. Buerger et al discloses a laminate as set forth above. Buerger et al differs from the claimed invention because Buerger et al does not disclose that the bond sites comprise lines. Zelazoski et al teaches that forming thermal bonds in laminates comprising nonwoven fabrics enhances the

ability of the fabric to transport liquids because the areas comprising the bond lines are more dense than the unbonded areas and liquids are drawn toward the more dense areas. See abstract. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed the bond sites in Buerger et al so that they comprised lines. One of ordinary skill in the art would have been motivated to form the bonds in the bond sites as lines because of the teaching of Zelazoski et al that forming linear bonds enhances the over all absorbency and fluid transport properties of the fabric.

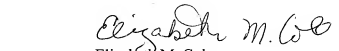
Buerger et al also differs from the claimed invention because Buerger does not teach employing the two-layer fabric as one of the upper layers in an absorbent article, although Buerger et al does teach that the fabrics are useful in diapers, see col. 1, line 11. Zelazoski et al teaches that bonded fabrics comprising a first layer and second layer are suitable for use as one of the body side layers in an absorbent article. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed the Buerger et al fabric as a body-side portion of an absorbent article as taught by Zelazoski. One of ordinary skill in the art at the time the invention was made would have been motivated to employ the Buerger et al fabric as a body side layer because Zelazoski et al teaches that such fabrics are useful as body side liners and because the Buerger et al fabric is strong, soft, absorbent and drapable.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (703) 308-0037. The examiner may be reached between 6:30 AM and 5:00 PM Monday through Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (703) 308-2414.

Inquiries of a general nature may be directed to the Group Receptionist whose telephone number is (703) 308-0661.

The fax number for official faxes is (703) 872-9310. The fax number for official after final faxes is (703) 872-9311. The fax number for unofficial faxes is (703) 305-5436.



Elizabeth M. Cole
Primary Examiner
Art Unit 1771

e.m.c

April 10, 2002